

What is Claimed is:

1. A flow completion apparatus for controlling the flow of fluid through a tubing string which extends through a wellhead housing that is installed at an upper end of a well bore and defines a tubing annulus surrounding the tubing string, the flow completion apparatus comprising:
  - a tubing spool which is positioned over the wellhead housing and which includes a central bore that extends axially therethrough, a production outlet that communicates with the central bore, and an annulus passageway that communicates with the tubing annulus;
  - 10 a tubing hanger which is supported in the central bore, is connected to an upper end of the tubing string, and includes a production bore that extends axially therethrough and a production passageway that communicates between the production bore and the production outlet;
  - a closure member which is positioned in the production bore above  
15 the production passageway;
  - an annular seal which is positioned between the tubing hanger and the central bore above the production passageway;
  - wherein the tubing spool further comprises a workover passageway which communicates the annulus passageway with a portion of the central bore  
20 that is located below the top of the tubing hanger; and
  - wherein the tubing hanger further comprises an annulus bore which extends between the workover passageway and the top of the tubing hanger;

whereby fluid communication between the tubing annulus and the top of the tubing hanger may be established through the annulus passageway, the workover passageway and the annulus bore.

2. The flow completion apparatus of claim 1, wherein the workover  
5 passageway extends between the annulus passageway and a portion of the central bore that is located above the annular seal.

3. The flow completion apparatus of claim 1, further comprising:  
a BOP which is removably connectable to the top of the tubing  
spool and which includes a BOP bore, a first set of BOP rams, and at least one  
10 choke and kill line that communicates with a portion of the BOP bore which is located below the first BOP rams; and

a THRT which is removably connectable to the top of the tubing  
hanger and which includes an outer surface portion, a production port that  
communicates with the production bore, and an annulus port that comprises a  
15 first end which communicates with the annulus bore and a second end which communicates with the outer surface portion;

wherein the first BOP rams are adapted to sealingly engage the  
outer surface portion above the second end of the annulus port;

whereby fluid communication between the tubing annulus and the  
20 BOP choke and kill line may be established through the annulus passageway, the workover passageway, the annulus bore, the annulus port and the portion of the BOP bore which is located below the first BOP rams.

4. The flow completion apparatus of claim 3, further comprising means for isolating the central bore from the second end of the annulus port.

5. The flow completion apparatus of claim 4, wherein isolation means comprises a second set of BOP rams which is adapted to sealingly engage the outer surface portion below the second end.

6. The flow completion apparatus of claim 4, wherein the isolation means comprises an annular seal which is mounted on the THRT below the second end and which sealing engages the BOP bore.

7. A flow completion apparatus for controlling the flow of fluid through a tubing string which extends through a wellhead housing that is installed at an upper end of a well bore and defines a tubing annulus surrounding the tubing string, the flow completion apparatus comprising:

a tubing spool which is positioned over the wellhead housing and which includes a central bore that extends axially therethrough, a production outlet that communicates with the central bore, and an annulus passageway that communicates with the tubing annulus;

a tubing hanger which is supported in the central bore, is connected to an upper end of the tubing string and includes a production bore that extends axially therethrough, a production passageway that communicates between the production bore and the production outlet, a generally cylindrical outer diameter surface, and an upper surface;

wherein the tubing hanger further comprises an annulus bore which extends between the outer diameter surface and the upper surface; and

wherein the tubing spool further comprises a workover passageway which communicates between the annulus passageway and the annulus bore;

whereby fluid communication between the tubing annulus and the upper surface of the tubing hanger may be established through the annulus

5 passageway, the workover passageway and the annulus bore.

8. The flow completion apparatus of claim 7, further comprising:

a BOP which is removably connectable to the tubing spool and which includes a BOP bore, a first set of BOP rams, and at least one choke and kill line that communicates with a portion of the BOP bore which is located below

10 the first BOP rams; and

a THRT which is removably connectable to the tubing hanger and which includes a cylindrical outer surface portion, a production port that communicates with the production bore, and an annulus port that comprises a first end which communicates with the annulus bore and a second end which

15 communicates with the outer surface portion;

wherein the first BOP rams are adapted to sealingly engage the outer surface portion above the second end of the annulus port;

whereby fluid communication between the tubing annulus and the BOP choke and kill line may be established through the annulus passageway,

20 the workover passageway, the annulus bore, the annulus port and the portion of the BOP bore which is located below the first BOP rams.

9. The flow completion apparatus of claim 8, further comprising means for isolating the central bore from the second end of the annulus port.

10. The flow completion apparatus of claim 9, wherein isolation means comprises a second set of BOP rams which is adapted to sealingly engage the outer surface portion below the second end.

11. The flow completion apparatus of claim 9, wherein the isolation  
5 means comprises an annular seal which is mounted on the THRT below the second end and which sealing engages the BOP bore.